

FIG 1

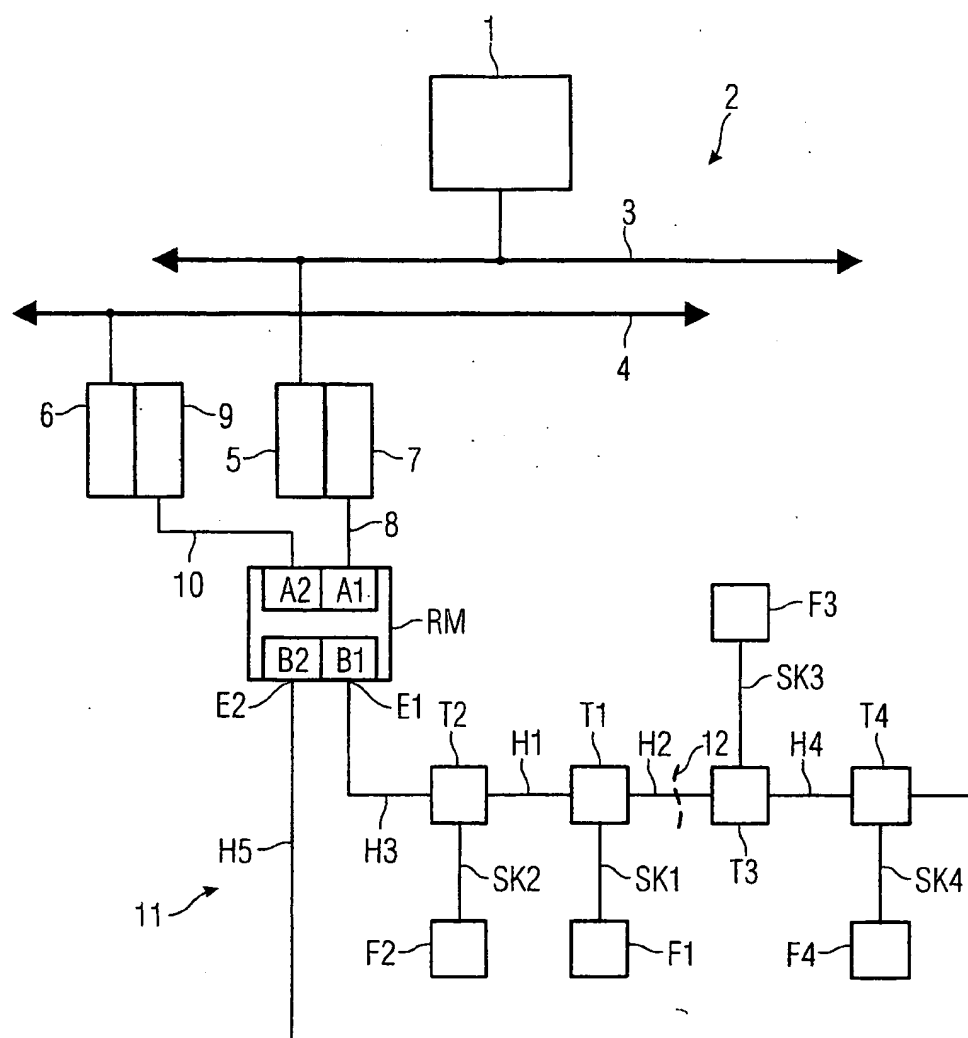


FIG 2

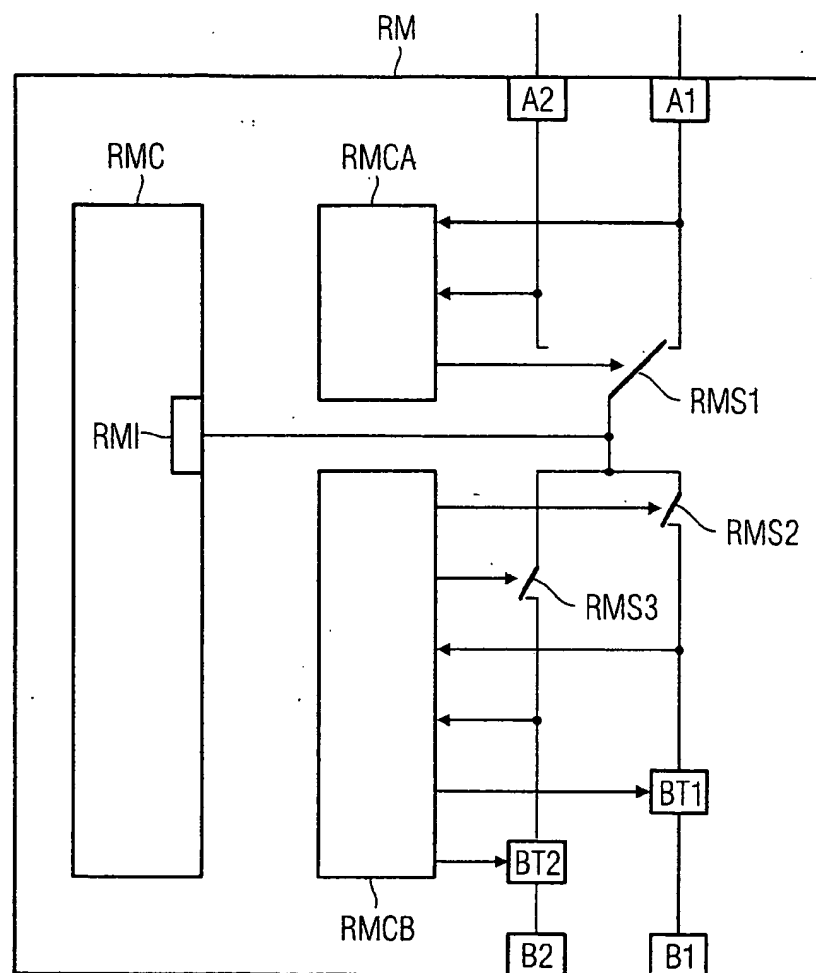


FIG 3

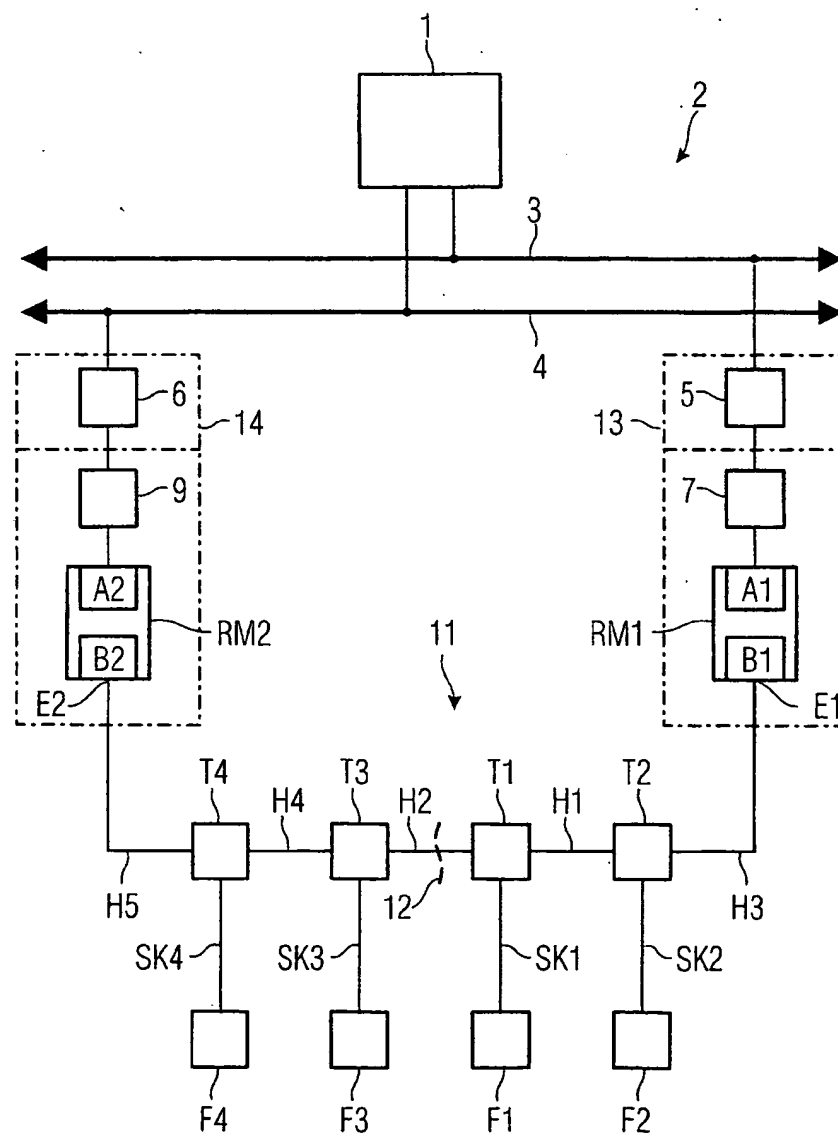
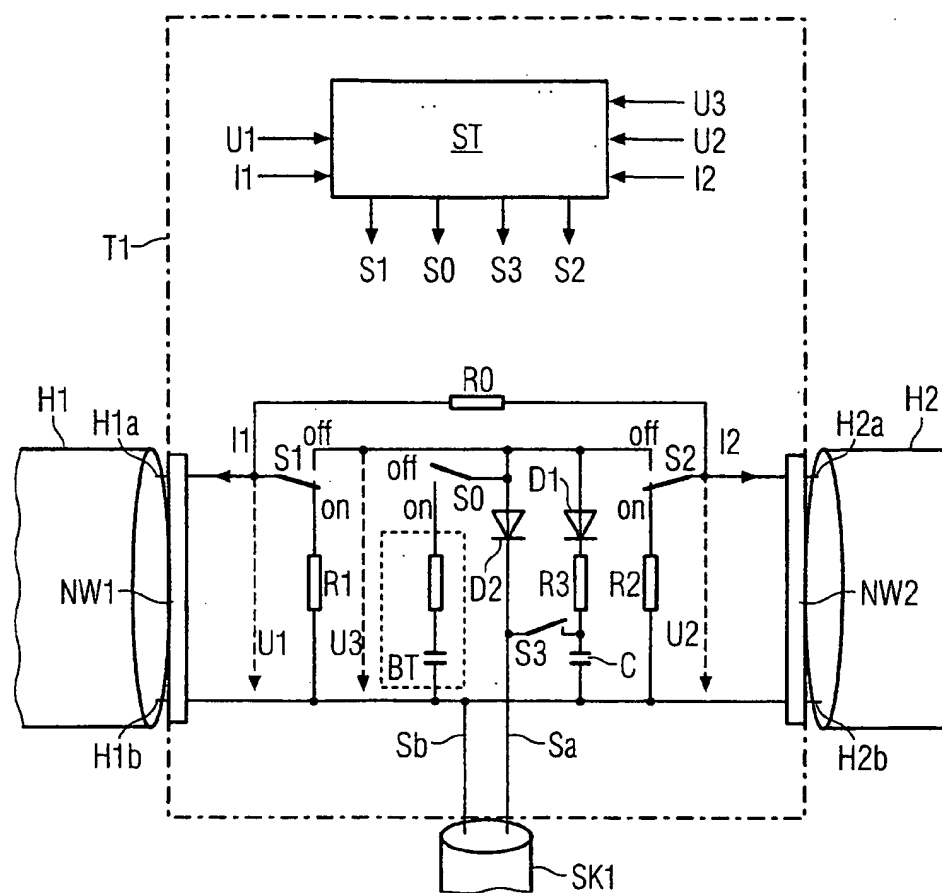


FIG 4



State	U1	K=U2/U1	S0	S1	S2	Next state	Remarks
IDLE	<U0	—	off	on	on	IDLE	
	>U0	—	off	on	on	TEST1	
TEST1	>U0	$\frac{\leq 2/5}{\geq 1/10}$	off	on	on	TEST2	Trunk cable 2 OK
	>U0	<1/10				SHORT	Trunk cable 2 short circuited
	>U0	$\approx 1/2$				OPEN	Trunk cable 2 open circuit
	>U0	>1/2				OK	Feed also via trunk cable 2
TEST2	>U0	$\frac{\leq 2/5}{\geq 1/10}$	off	off	on	OK	Trunk cable 2 OK
	>U0	<1/10				SHORT	Trunk cable 2 short circuited
	>U0	$\approx 1/2$				OPEN	Trunk cable 2 open circuit
SHORT	>U0	<1/10	on	off	on	SHORT	Trunk cable 2 short circuited
	<U0	—				IDLE	RESET from RM
	>U0	$\frac{\leq 2/5}{\geq 1/10}$				IDLE	Short circuit rectified
	>U0	$\approx 1/2$				OPEN	Trunk cable 2 open circuit
OPEN	>U0	$\approx 1/2$	on	off	on	OPEN	Trunk cable 2 open circuit
	<U0	—				IDLE	RESET from RM
	>U0	$\frac{\leq 2/5}{\geq 1/10}$				IDLE	Open circuit rectified
	>U0	<1/10				SHORT	Trunk cable 2 short circuited
OK	>U0	≈ 1	off	off	off	OK	
	<U0	—				IDLE	RESET from RM

FIG 5

FIG 6

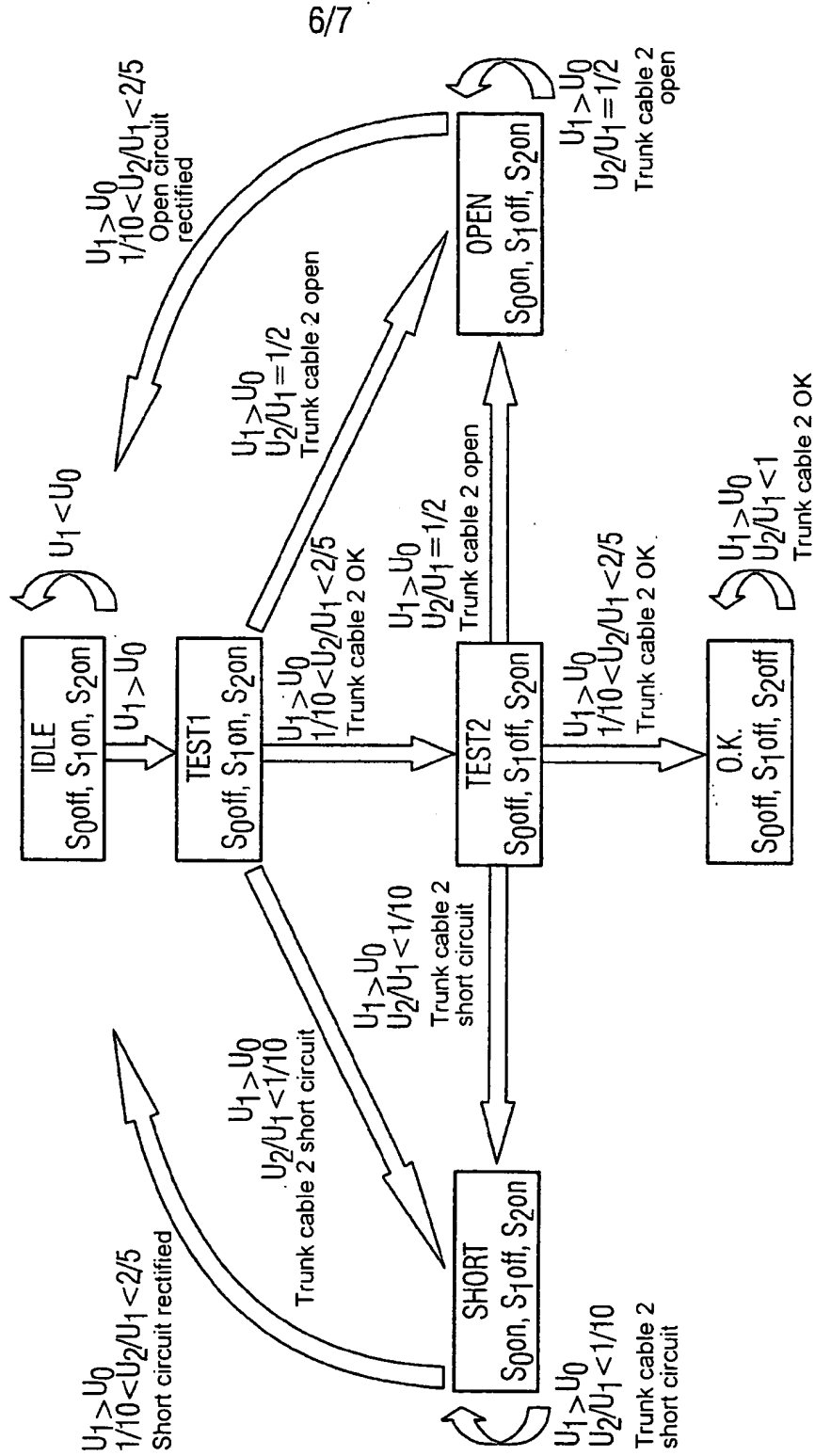


FIG 7

